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INTERNATIONAL HARVESTER

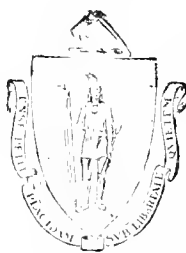


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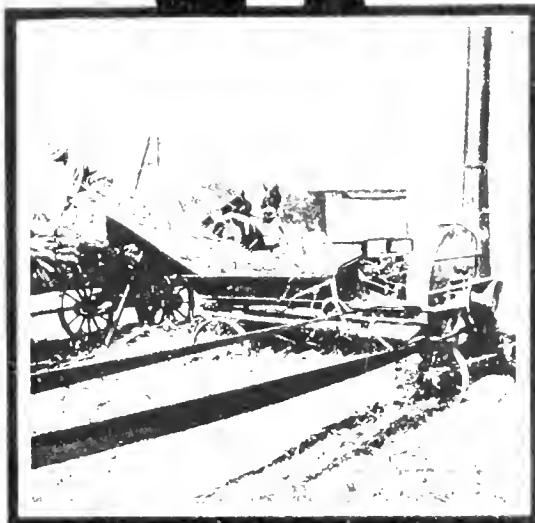
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KNIFE GRINDERS
BINDER TWINE
THRESHERS
STONE BURR MILLS
GRAIN DRILLS
CREAM SEPARATORS
OIL AND GAS ENGINES
MANURE SPREADERS
FERTILIZER SOWERS
TRACTORS
WAGONS AND TRUCKS

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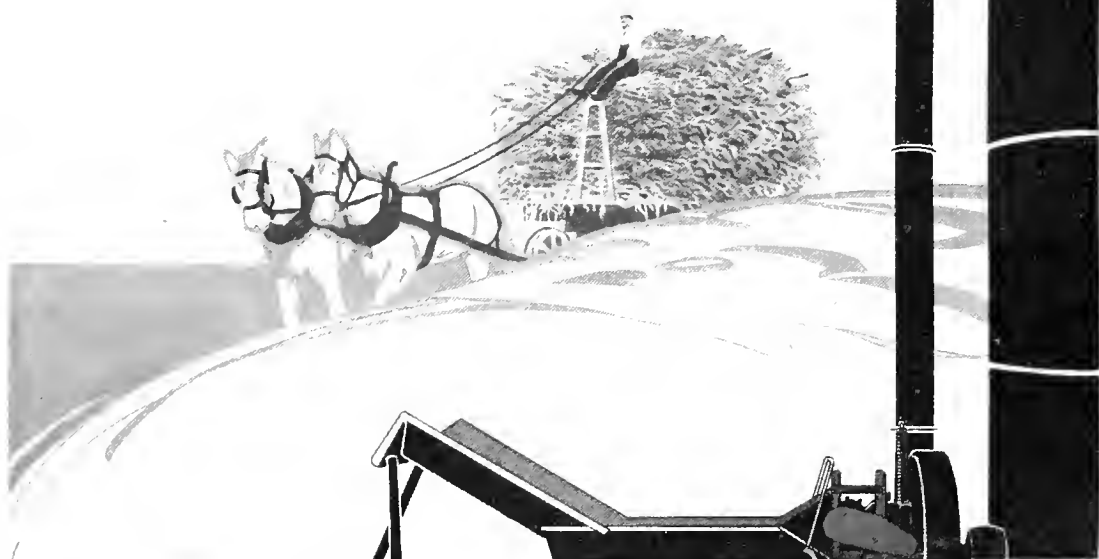
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INTERNATIONAL ENSILAGE CUTTERS



INTERNATIONAL ENSILAGE CUTTERS



INTERNATIONAL HARVESTER COMPANY OF AMERICA

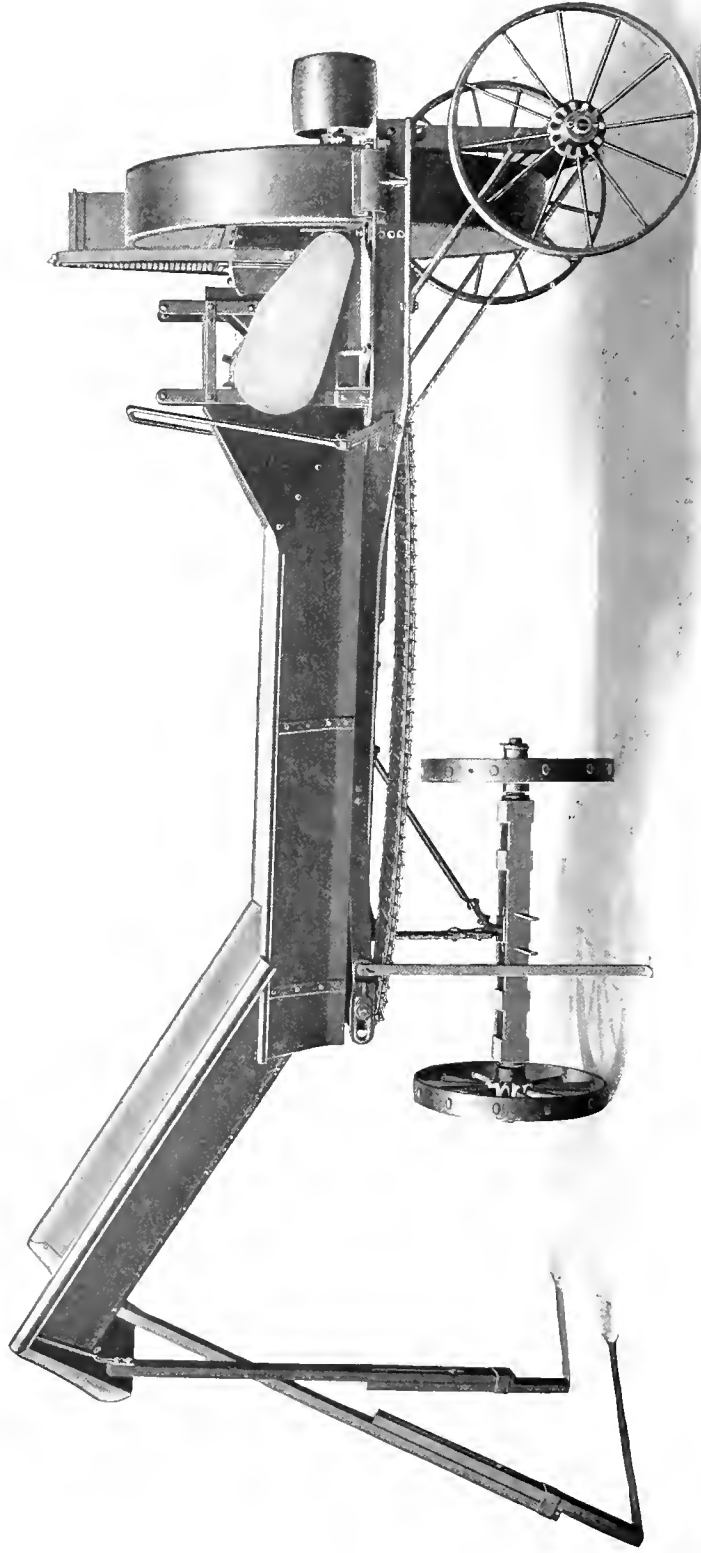
CHICAGO

(INCORPORATED)

U S A

International Ensilage Cutter

Representative of Types A and B



International Ensilage Cutter, Types A and B. For specifications, see page 22



International Ensilage Cutters

Types and Capacities: International ensilage cutters, Types A and B, are built for those who can use machines with large capacities. They are very popular with custom ensilage cutter operators. These large cutters are also much in demand by groups of farmers who club together for the purpose of buying and using a machine to operate on the farms of the club members, where quick work, big capacity, and skilled service are required.

Type A: The Type A machine requires about 20 to 25-H. P., oil or gas engine, for running, and has a capacity of from 16 to 25 tons per hour.

Type B: The Type B machine requires a 15 to 20-H. P., oil or gas engine, and has a capacity of from 12 to 16 tons per hour.

These capacities depend of course upon the kind of stalks being cut and the condition the stalks are in at the time of cutting.

Type E: The Type E ensilage cutter is designed for the farmer who desires to do his own cutting, or where a small machine is required. A 10 to 15-H. P. gasoline or oil engine is required to operate the Type E. It has a capacity of from 10 to 12 tons per hour, based on the kind and condition of stalks, as above stated.

Why the Main Frame Should be Made Strong: The cutting and elevating of ensilage is heavy work, to say the least. There is nothing that racks any machine as hard as rapid motion which must be kept up for a long period of time. To keep the working mechanism in alignment and the machine working freely at all times requires an exceptionally strong main frame.

How the Main Frame on the International is Made: The main frame, or the foundation of the International ensilage cutter, goes through such a careful and painstaking process of construction that the finished article does not vary one-sixteenth of an inch from the dimensions specified in the blue print. This can be verified by measuring the dimensions of any stock machine.

All the Holes in the Main Frame Punched at the Same Time: All the holes in the heavy steel channels constituting the main frame are punched in one operation on a gang punch. These channels are individually straightened and gauged on a master form to secure accuracy. Next, the parts of the frame are clamped into a machined riveting form and hot riveted together. The frame as a whole is then checked up again, which insures an accurate foundation for all working parts. The result is a main frame which has the solidity and strength of a one-piece construction, with sufficient rigidity to hold all the working parts, when mounted, in perfect alignment even under the most trying conditions.

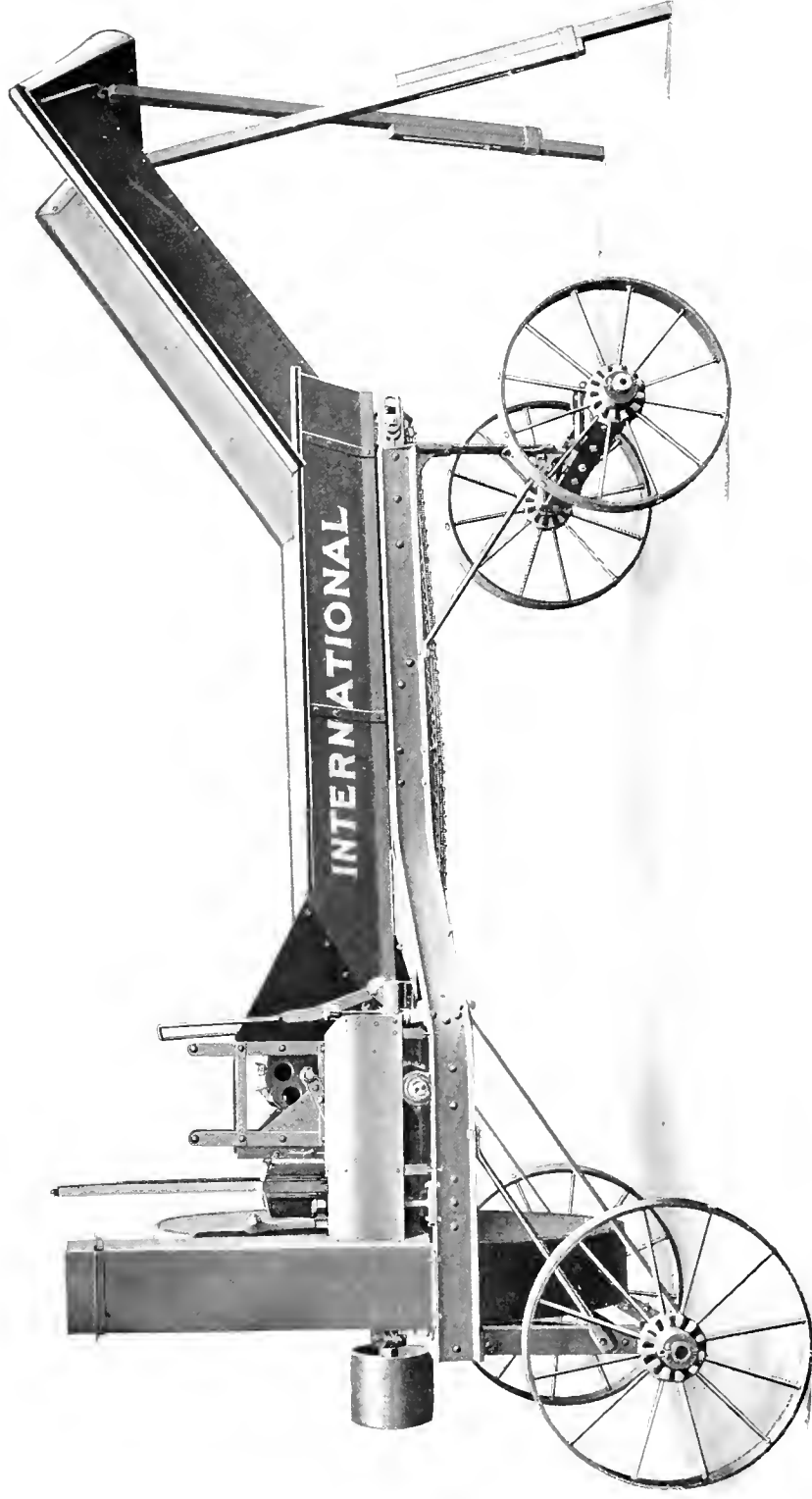
Reinforcements: The frame is still further reinforced by means of cross sills consisting of heavy bar steel.



Main frame, Types A and B, International Ensilage Cutters

International Ensilage Cutter

Representative of Types A and B



International Ensilage Cutter, Type A and B. For Specifications, see page 22



INTERNATIONAL ENSILAGE CUTTERS



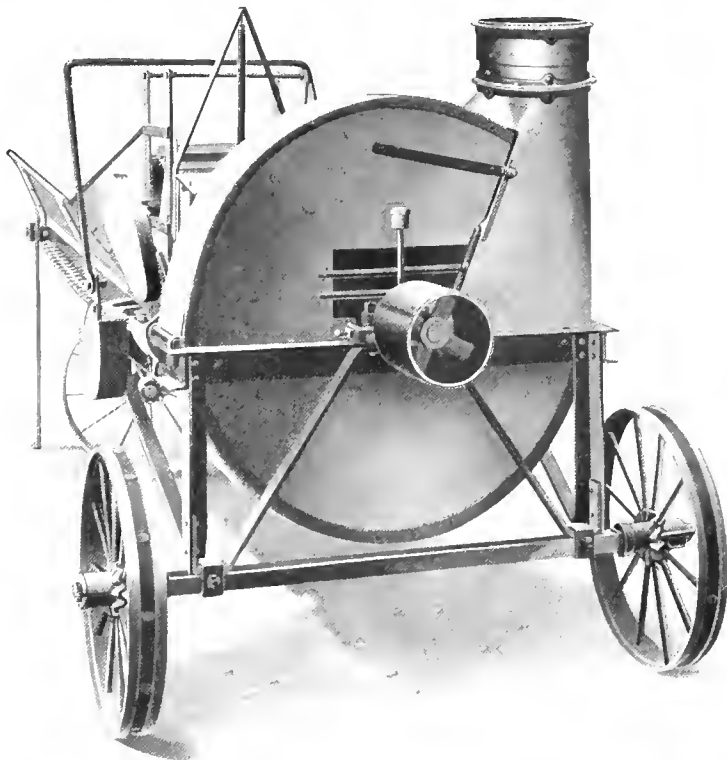
A Superior Frame: It is easily superior to any other main frame ever built as a foundation for an ensilage cutter. The added cost and trouble in making this frame is more than offset by the gain in ease of operation and the reduced wear on the bearings and working parts.

Trucks for All Types: The trucks for all machines have a steel construction. The wheels are made with oval spokes, hot riveted in the hub and tire.

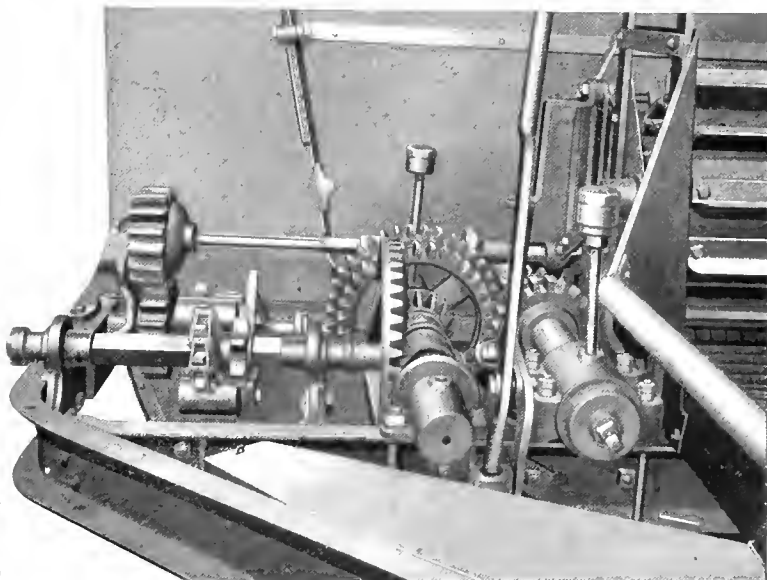
Tires are Made Wide and Strong: The front wheels are amply large, with long hubs equipped with sand rings at either end. They can be turned completely under all machines. There is ample clearance for the conveyor when the front wheel is turned under.

Driving Mechanism for Types A, B, and E: The driving mechanism for all types of International ensilage cutters is very similar except that Types A and B are equipped with gear-speed changes, allowing eight different lengths of cut.

The self-aligning boxes and shifting devices for throwing the mechanism out of gear are practically the same on all sizes, the only difference being in point of location and relation to the rest of the working parts. The changes in length of cut on all types are made by sprockets on the bevel-gear shaft, and the feed-roll drive shaft. The bevel gear shaft being square, makes it easy to slide the sprocket on this shaft back and forth to make the proper adjustment for changes in cut.



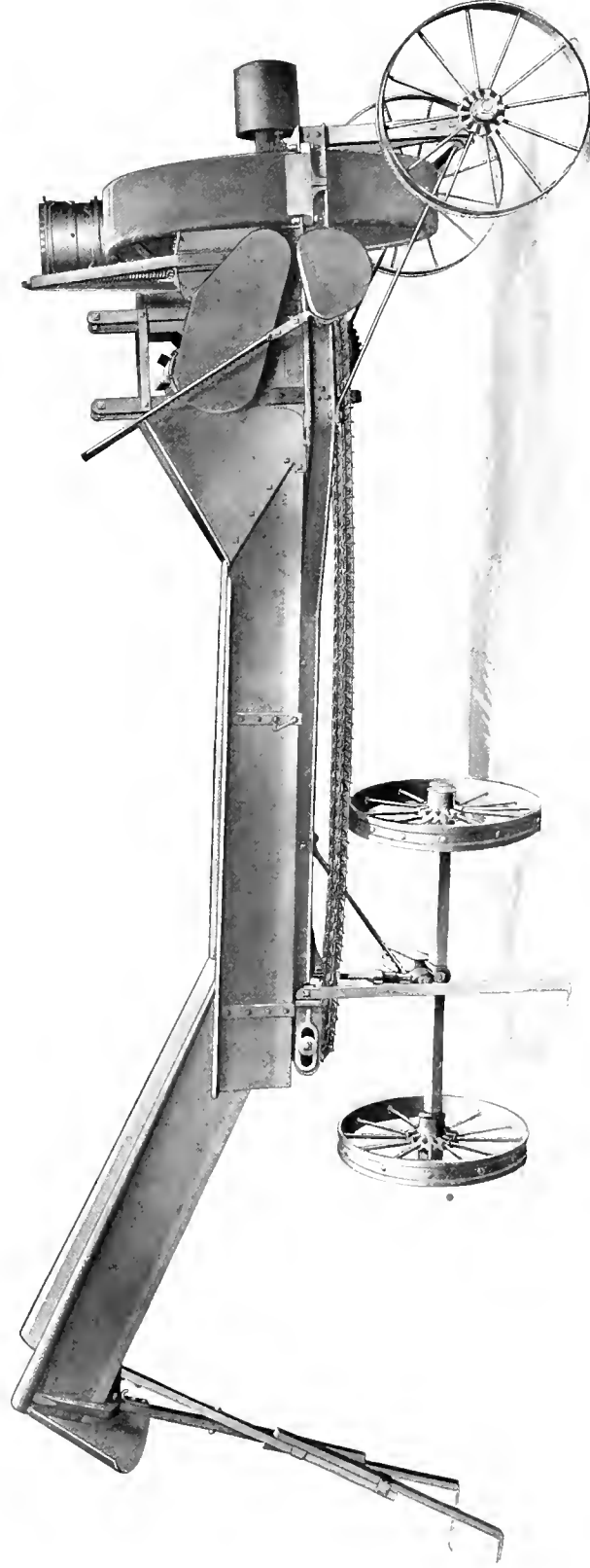
Rear end International Ensilage Cutter, Type E—Note strong construction of the frame and that the machine can be easily unmounted if desired to use the ensilage cutter without trucks



Construction of gears, Types A and B—Note the simplicity and easy oiling facilities

International Ensilage Cutter

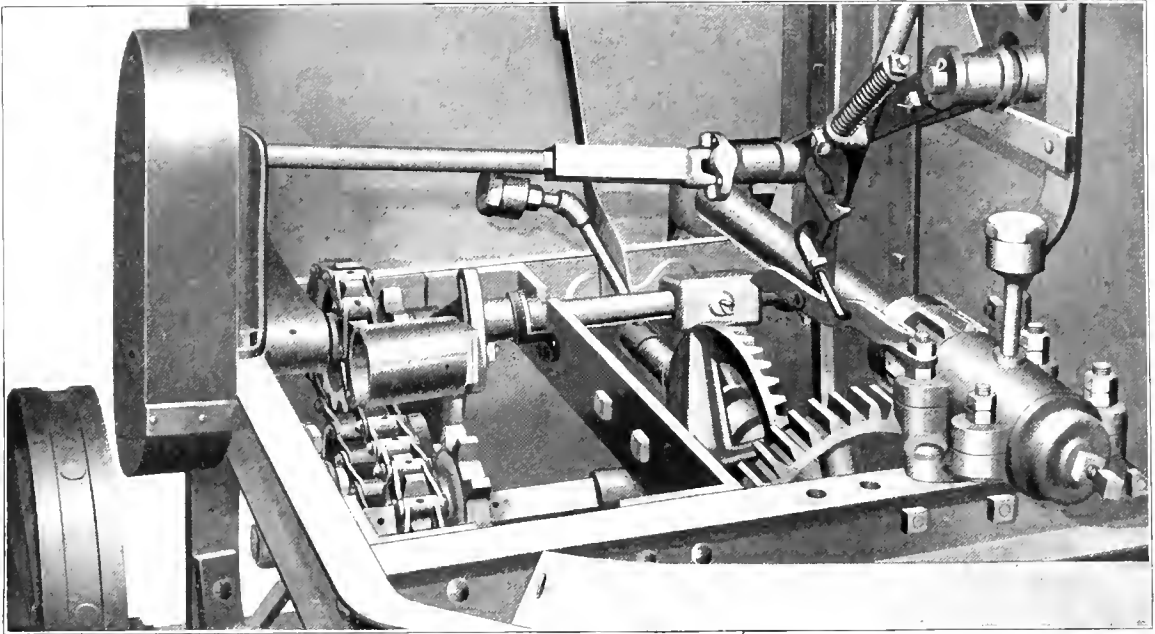
Type E



International Ensilage Cutter, Type E. For specifications, see page 22



INTERNATIONAL ENSILAGE CUTTERS

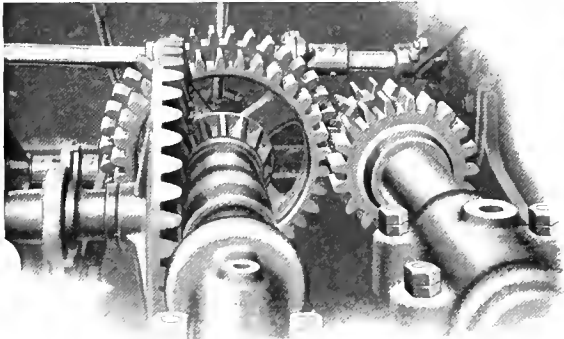


Driving mechanism for Type E Ensilage Cutter. Flywheel shaft has adjustment on end to take up wear and keep knife in the proper relation to the cutter bar

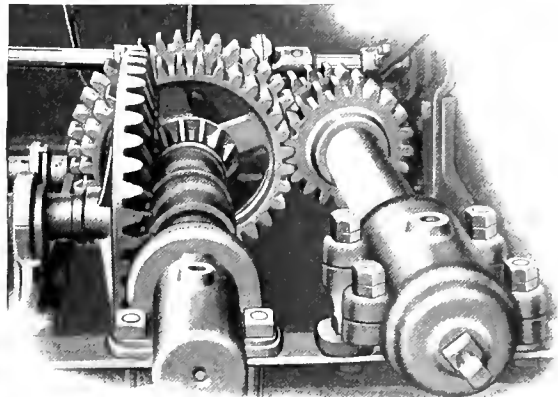
Aligning Facilities: All working parts are easy of access, so that aligning can be done without any trouble. The bearings are self-aligning, which insures durability and easy running. All bearings which are difficult to oil and require much lubrication are equipped with hard oilers, which enables the operator to oil the bearings even when the machine is running.

Roller Bearings: Practically all the most important bearings are equipped with roller bushings. Roller bearings on a machine of this kind have much to do with the ease of operation as it tends to reduce friction to a minimum.

Speed Changes on Types A and B: Types A and B ensilage cutters can be adjusted for cutting eight different lengths of fodder. This is brought about by the speed-change gears, pictured below,



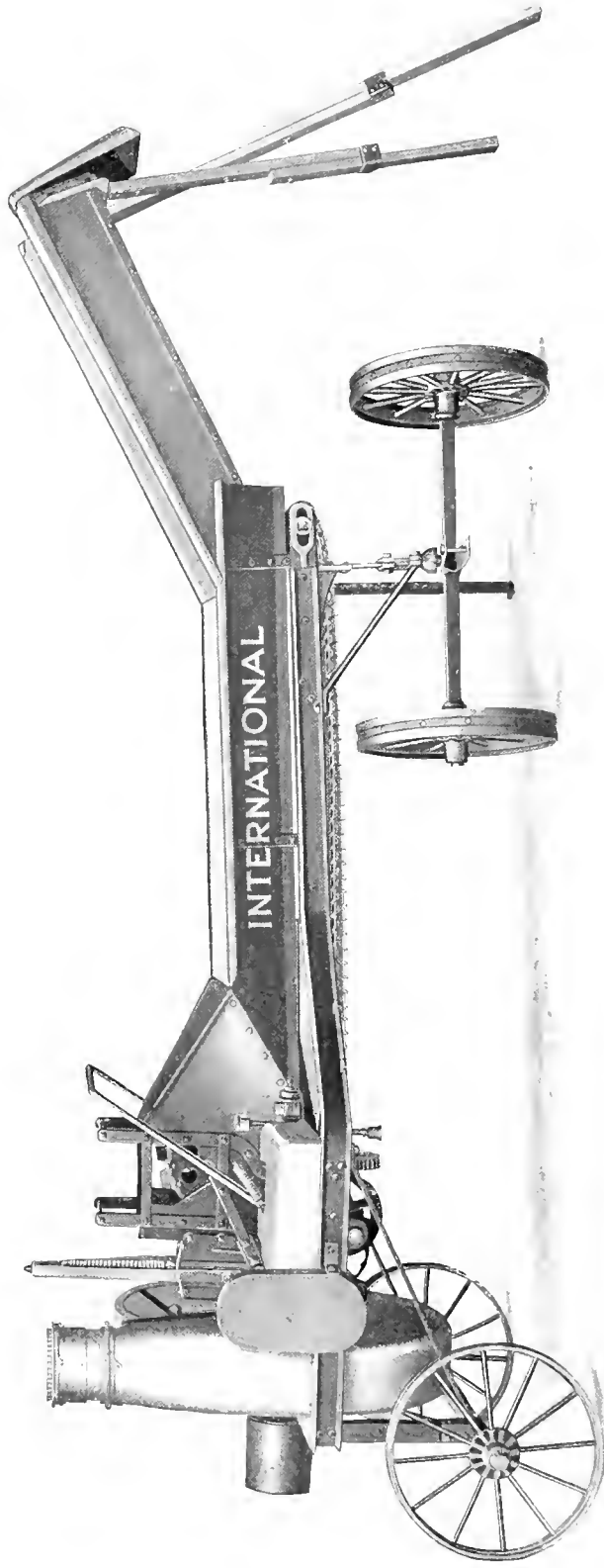
Speed change device, Types A and B Ensilage Cutter. Rear gears in mesh



Speed change device, Types A and B Ensilage Cutter - The change of speed is made by moving the gear on the shaft until it meshes with the proper gear on the opposite shaft

International Ensilage Cutter

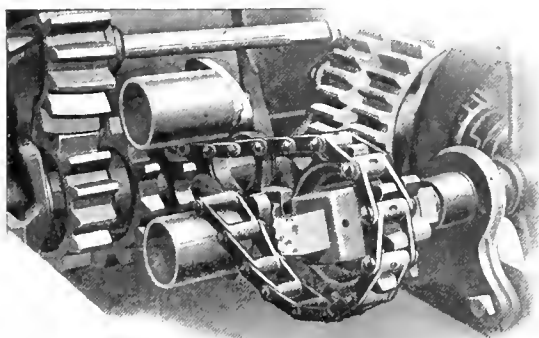
Type E



International Ensilage Cutter, Type E. For specifications see page 22



INTERNATIONAL ENSILAGE CUTTERS



Automatic chain tightener adjusted when feeder is reversed

in connection with the different chain-speed changes. The change gears on the flywheel shaft are held in place with a set screw. In changing the speed it is only necessary to loosen the screw and move the gear backward or forward as desired on the flywheel shaft. This requires but a moment's time. The change gear is driven with a long feather key, thus relieving the set screw of all the work except holding the gear in place.

All the necessary devices for securing the different lengths of cut are found on the machine. There are no loose gears and sprockets to carry with the machine and no substitutions are necessary. In fact, there is nothing

to add or take away, which is a big advantage from a time-saving standpoint.

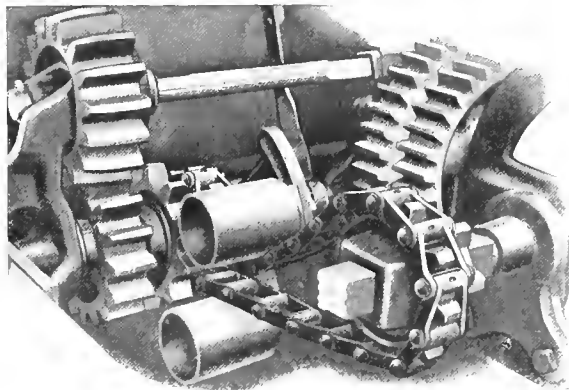
Advantage of Change Gears: The big advantage of the change gears is that it gives all the benefits of two gears in one. Should a tooth break on a gear, it will not delay the operation longer than it takes to loosen the set screw holding the sliding gear on the shaft, and move it so that the other set of gears is in mesh. The same approximate length of cut as before the breakage is then secured by shifting the chain on the double sprocket. Breakage is sometimes caused by hard objects passing through.

Features Common to All Machines

Automatic Chain Tighteners: Using a chain to drive the feeding mechanism necessitates an automatic chain tightener, and the question has been to devise some means whereby the chain would automatically adjust itself to different feeding conditions when reversing the machine.

The automatic chain tightener used on the International ensilage cutter has been found very satisfactory.

Advantage of Tightener: The automatic chain tightener is composed of two rollers fastened to the bracket hinged on the lower feed roll drive shaft. When the conveyor is operated with a forward movement, the top of the chain is slack. The distance between the two rollers is such that the straight part of the chain pressing against the lower roller pulls the upper roller down against the slack part of the chain. When the conveyor is reversed, the chain tightening at the top pulls the lower roller up against the under part of the chain, thus automatically adjusting itself to this condition. The great advantage of this tightener is that while the chain can be operated at the proper tension to run the conveyor steadily and evenly, it does not add to the draft or cause unnecessary wear on the chain. The rollers are adjustable in slots on the tightener



Automatic chain tightener adjusted when the machine is running forward



INTERNATIONAL ENSILAGE CUTTERS



The rear knife wheel bearing is equipped with adjustment devices to keep the knife in proper relation to the cutter bar

Flywheel Adjustment: It is particularly necessary on ensilage cutters to have the knives working in proper relation to the cutter bar at all times. If the knives are too far away from the cutter bar, they do not cut the fodder properly and the draft of the machine is increased. If they are set too close to the cutter bar, they act as a brake on the flywheel, and dull both knives and the cutter bar. International ensilage cutters are equipped with every adjustment necessary to keep the knives in proper relation to the cutter bar at all times.

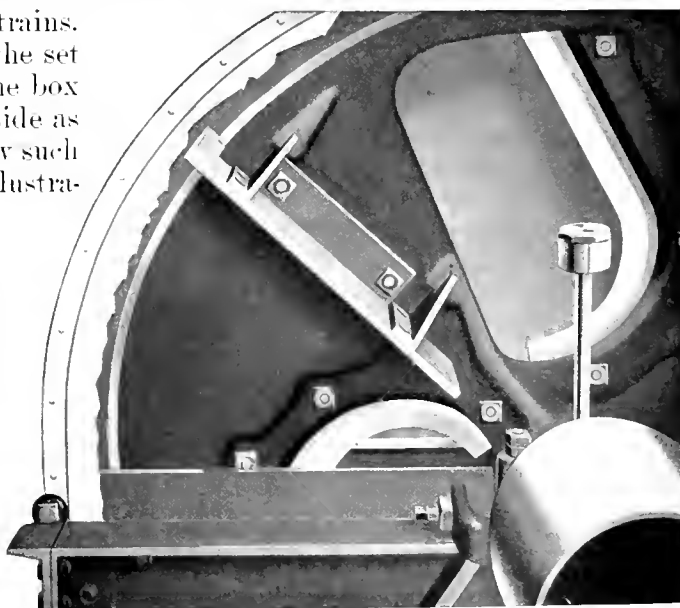
The rear box for the flywheel shaft is equipped with an adjusting device, which enables the operator to set the flywheel so as to secure the proper alignment of the knife to the cutter bar if this relation should be disturbed by long wear or heavy strains. This is accomplished by adjusting the set screws on the bracket which move the box to or from the cutter bar or to either side as desired. Slotted holes in the box allow such an adjustment to be made. Note illustration at top of this page.

The front end of the flywheel shaft is also equipped with a set-screw adjustment. A case-hardened steel thrust bearing is situated between the front end of the flywheel shaft and the set screw in this box.

Powerful Blower: The flywheel and the fan blades of the International ensilage cutters are so constructed as to form an exceedingly strong and powerful blower. International machines have elevated ensilage to the top of a 64-foot silo with ease, evidence enough of superior construction.

bracket to allow for variation in the tightness of the chain and the different sizes of sprockets.

Long Bearings for Knife Wheel Shaft: The speed of the flywheel, together with the strain of the belt on the pulley, tends to produce a great deal of friction. The heavy work of cutting and elevating also adds to the strain exerted on the bearings. To counteract this friction, the bearings on the International are made long and heavy, and are lined with the best grade of babbitt. As the bearings are held firmly in alignment and the proper oiling facilities have been provided, the friction is held down to a minimum.



The solid wheel practically forms a vacuum, assuring greater force for elevating ensilage



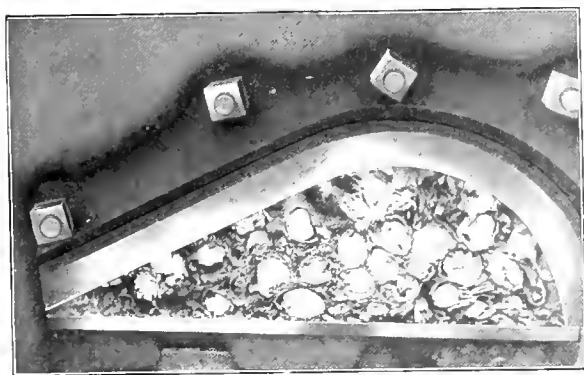
INTERNATIONAL ENSILAGE CUTTERS



How the Powerful Blast from the Blower is Secured: The flywheel is practically solid, and is equipped with three knives and three fan blades. The openings in the flywheel are immediately in front of the knives, so that when the knife has passed the cutter bar, the opening is closed with the solid part of the flywheel, causing the fan and side of the wheel to practically form a vacuum, which allows more force or wind pressure for blowing out the ensilage. The fan is placed in such a position that it follows the cut feed, and forces it out, allowing the fan to clear itself instantly. For this



View of knife, cutter bar and conveyor with feed roll raised. The inner edge of the knife makes a close shear cut, preventing stalks, twine, and trash from wedging between the cutter bar and the knife. This insures a clean cut every stroke, and prevents winding on the flywheel shaft



Photograph showing clean-cut stalks in the position in which they were delivered by feed rolls

reason the flywheel always runs freely and easily.

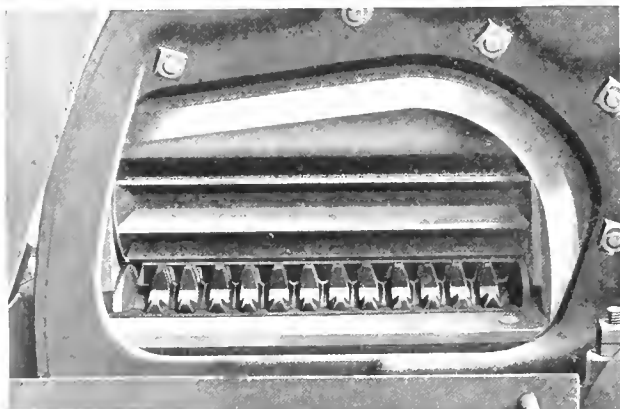
How the Steel Fan Wings are Attached: The steel fan wings are bolted solidly to the flywheel, braced by angle brackets which are riveted to the fan wings themselves, and backed up by lugs on the flywheel. The outer ends of the fan wings are provided with steel scrapers to prevent the accumulation of cut ensilage on the inside of the housing.

Size of Blower Pipes: The construction of the blower on all three types is

practically the same, the only difference being in the different sizes, Types A and B having a 9-inch blower pipe, while the Type E has a 7-inch pipe.

The Advantage of Using Concave Knives: The knives are concave, of a special shape, and give a pronounced inward shear cut, which requires the minimum of power, and holds the stalks in position, preventing trash and twine from winding about the flywheel shaft.

The knives are also offset at the cutting edge to give clearance when passing the cut stalks.



View of the cutter bar and knife showing the feed roll down. This illustration and the one at the top of the page show the great range that can be made in the quantity of stalks being fed to the knife



INTERNATIONAL ENSILAGE CUTTERS



The wide, specially shaped throat, paddle and feed rolls, and steel conveyor force all the stalks to the knife—no clogging at this point

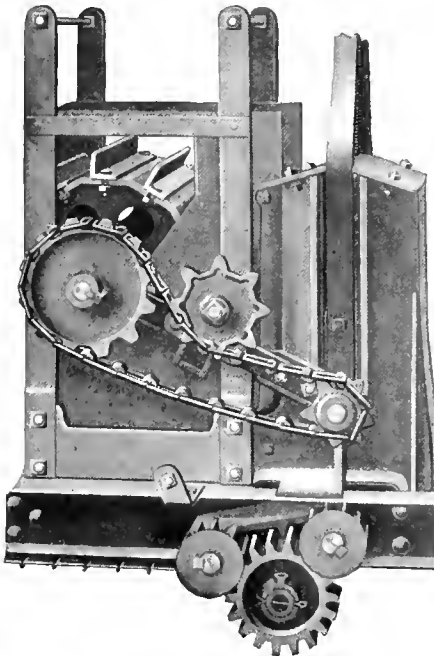
the dull set is being sharpened. The knives are easy to remove and put on.

Cutter Bar: The cutter bar is set up on an angle with the lower edge backed off to give a sharp cutting edge. This bar is fastened to its support by plow bolts which are securely held by lock nuts. The bar has two cutting edges which are reversible and can be easily ground.

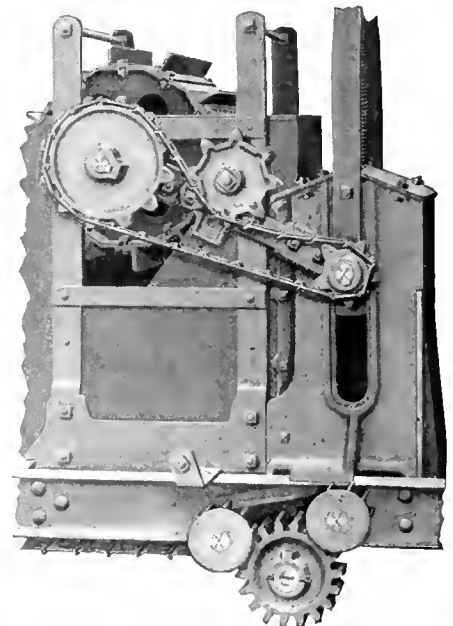
Force Feed: International ensilage cutters are equipped with a force-feeding device which grips and pushes the stalks into the throat of the machine without permitting them to clog the feed opening. This is made possible by the great range of movements of the paddle and feed rolls, which automatically adjust themselves to the amount of feed. These rolls work independently of each other. If a heavy charge of fodder strikes the paddle roll, it is automatically raised, then its weight begins to force the stalks down so that by the time they reach the feed roll, the bulk has been pressed down compactly,

Stalks are Held Rigidly in Position While Being Cut: Another big advantage of the concave construction of the knives is that the stalks, instead of being forced toward the outer edge of the knives, are held in the position in which they are placed by the feed rolls. There is no opportunity for stalks to be forced in either direction as the heel of the knife holds them in position while the inward shear severs them. This means that there will be very little shelling of the corn from the cob, thus insuring a cleaner job of cutting.

An extra set of knives is furnished with each machine so that the work can be carried on while



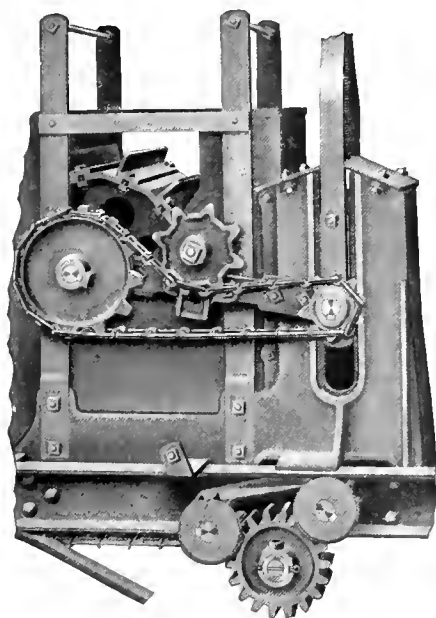
Paddle roll and feed roll in the lowest position



Paddle roll and feed roll in the highest position



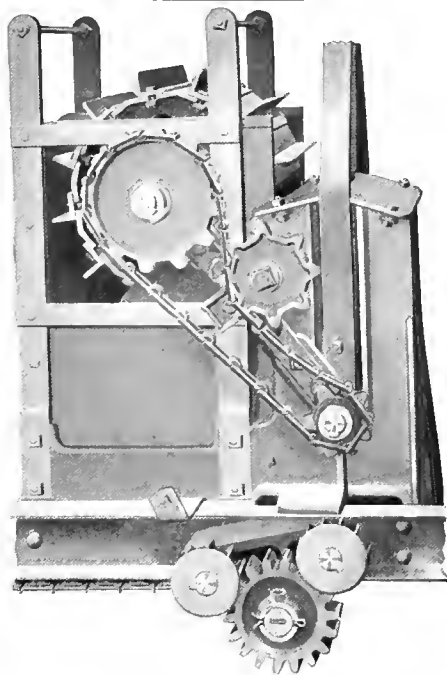
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Paddle roll in low position, feed roll raised

which makes it easier for the feed roll to grasp them. The pressure exerted by the paddle roll is regulated automatically by the amount of the feed. In every case the pressure is positive and forces the feed into the feed opening and to the knives.

The shape of the sides of the feed opening is also an advantage in securing a positive feed. Straggling ends of the feed are directed toward a common centre so that the



Paddle roll raised, feed roll in low position

paddle roll can get the best grip possible.

An Even Feed is Assured: The conveyor is made of sheet-steel slats with the edges turned up to make them more aggressive. When the conveyor and paddle roll grasp the stalks from below and above, the grip on the stalks steadily forces them to the feed rolls. The different parts of the feeding mechanism all travel the same number of feet per minute so that they work in perfect harmony and prevent any slipping of the stalks, making it practically impossible to choke the throat of the machine. A more even flow of fodder results in a much greater capacity for the same size machine than can be obtained by hand feeding. It also relieves the mechanism of the sudden jars and jolts which come with an uneven flow of fodder. Capacity is always increased by steady feeding.

Figure out what it costs per day to have the capacity of your machine cut down by one-third or one-half on account of uneven feeding. Then multiply by the cost per day and by the number of days in a season's run, and you will know just how much money you can save by running an International ensilage cutter.

Hand Feeding Not Always Satisfactory: Another point for consideration is that it is absolutely impossible for a man to feed an ensilage cutter by hand evenly and rapidly. Hand feeding at best lowers the capacity of any machine. With an International there is no variation of feed, hence, the machine is running full capacity at all times, if the pitchers keep the stalks going into the chute continuously. Besides, the use of this chute in connection with the paddle roll, does away with the services of one man which makes a big saving in wages and board possible each cutting season.

Upper Feed Roll Spring: The spring located above the upper feed roller distributes an even pressure the full width of the feed throat, and keeps the upper roller in a horizontal position as it moves up and down.



INTERNATIONAL ENSILAGE CUTTERS



Observe that the man's shoulder rests against the gear clutch lever. It is impossible for him to reach his hand as far forward as the knife without throwing the machine out of gear

Safety Devices: International ensilage cutters of all types are equipped with safety devices which cover every part of the machine liable to injure the operator. The state of Minnesota has very strict laws relating to safety appliances on farm machinery. On account of these laws many companies are unable to sell their machines in this state. The International ensilage cutter was carefully examined by the state inspector, and passed all the requirements laid down by the law for safety appliances. Furthermore, the commissioner of labor in the state of Minnesota complimented this Company on the complete safety equipment of the International ensilage cutter.

Safety Shifting Lever: One of the important features of all International ensilage cutters is the safety-shifting

lever. This lever extends from the clutch side up over the top of the throat and down to the other side where it is pivoted to the frame. It throws the machine in and out of gear, forward and reverse. It is placed in such a position that the operator will throw the mechanism out of gear automatically should he get into too close proximity to the feed rolls.

The lever does not lock solid like an ordinary shifting lever, but slips from one notch to another when pressure is applied to secure the three different positions desired in the following order—in gear, out of gear, and reverse, counting toward the throat of the machine.

The fact that it extends up over the feed throat allows it to be operated from either side of the machine.

Too much stress cannot be laid upon this feature when one realizes how quickly accidents happen and how necessary it is for the operator to have a clutch lever handy and easy to operate when the occasion so requires.



Filling a 50-foot silo. The top 15 feet is a water tank



INTERNATIONAL ENSILAGE CUTTERS

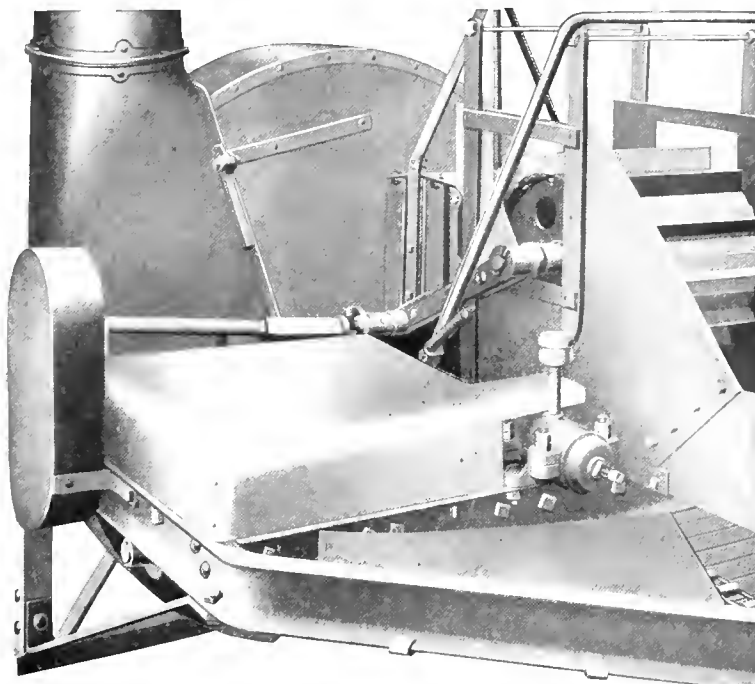


Shield Over Mechanism:

The gearing on both sides of the machine is covered with shields to protect it from falling stalks or trash, and also to prevent the operator from coming in contact with any of the gears. The shields can be easily removed to give the operator ready access to the working mechanism whenever it becomes necessary to make any adjustment or changes.

It can be seen that every attention has been given, in designing the machine, to protect the operator from personal injury. These features alone will recommend the International ensilage cutter to anyone who is interested in a machine of this type.

Handy Tool Box: A steel tool box, fastened solidly to the main frame, is provided for the extra set of knives accompanying each machine, and necessary tools.



The shield over the mechanism keeps any person about the machine out of danger, and protects the gears from contact with hard substances



The work is always well done with an International Ensilage Cutter



INTERNATIONAL ENSILAGE CUTTERS



Operator starting to throw back fan-house cover. Note eccentric handle raised

Fan-House Cover: A fan-house cover that can be held solidly in place and opened quickly and easily is a necessary feature, and one that is seldom found on an ensilage cutter.

Held by Two Levers: On International cutters the fan house is held in place by two levers working on the eccentric plan—one on each side of an angle bar fastened to the blower outlet. The eccentric shape of these levers lock the cover solidly in place. When the operator desires to open it, he releases the latches, lifts up the cover, and, stepping around to the rear end, throws the cover over. When this is done, the operator has the flywheel, knife, and cutter bar within convenient reach so that he can easily make whatever adjustments or changes are necessary. As a matter of fact, there is no adjustment necessary to be made that is difficult to reach.

These conveniences of operation are of special interest because they save a great deal of time if anything goes wrong with the machine. It is an expensive proposition to have a number of men, teams, and wagons idle for a few hours.

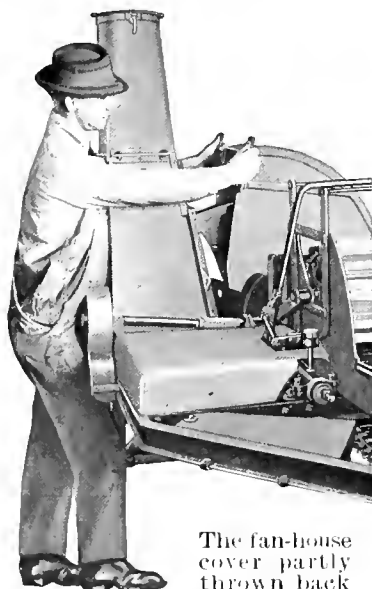
Made of Sheet Steel and Braced: There is a great deal of wear and strain on the fan-housing. Therefore, it is made of heavy sheet steel, thor-

oughly braced. The fan-house sides are each made of a single piece of sheet steel, electrically welded to the side of the rim. The rim is 12-gauge sheet steel, rolled in the shape of a channel. This construction makes the fan-housing practically one piece.

Operator is Protected: A grating is placed over the air inlet of the fan-housing in

the center to protect the operator, or anyone else, from getting their hands into the wheel.

It is not generally realized that there is a powerful suction at the air inlet to the fan housing, and this, on many machines, is often the cause of unlooked-for accidents. A loose coat will often be drawn in by the suction when the operator passes by. This cannot happen on the International.



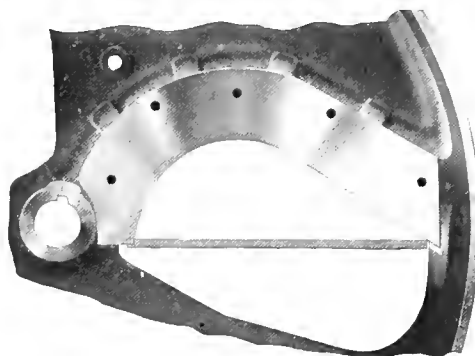
The fan-house cover partly thrown back



Fan-house cover open



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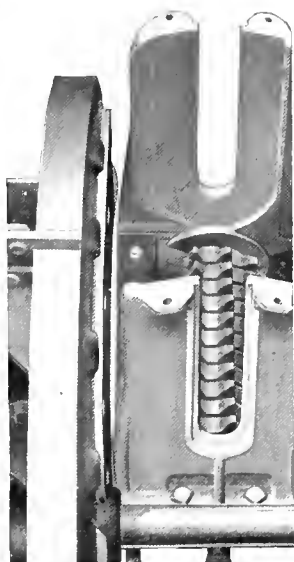


The knife is set into the flywheel against four lugs and is solidly held in place with lock nuts. Note the band around the outside of the flywheel to increase the strength and safety

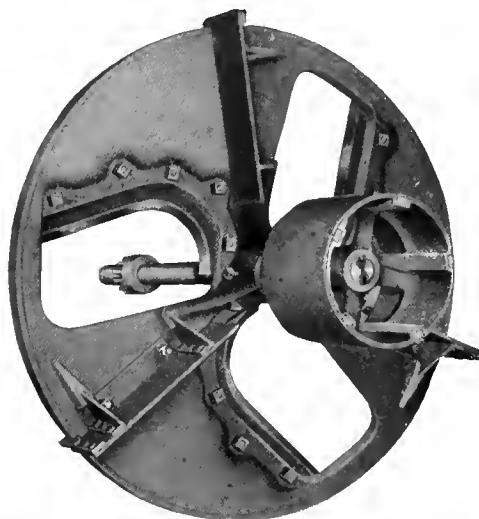
makes for safety, as it adds greatly to the strength of the wheel. The knife seats and lugs are all accurately machined to gauge. The concave knives are ground to accurate thickness.

How Knives are Attached: Each knife is attached to the wheel with five heavy bolts set staggered and securely held by lock nuts. The lugs against which the knives rest take the shearing strain off the bolts. The fact that the knives and flywheel are accurately gauged and fitted means that when adjustments have once been made the knives can

be easily and quickly changed. The point of the knife is protected by a knob-like projection in the casting. This projection makes it impossible for the point of the knife to catch on the cutter bar provided the knife is securely bolted in place, even if the operator allows the flywheel adjustment to get loose. The projection will strike the edge of the throat casting which holds the upper feed roll and the sound will give the operator warning in time to fix the adjustment before any harm is done. The edge of the throat casting slopes at a slight angle, coming out even with the cutter bar at the bottom. This will force the knife away from the cutter bar and prevent breakage.



Top view looking down between flywheel and cutter bar. Note shape of feed-roll casting and slight projection on flywheel



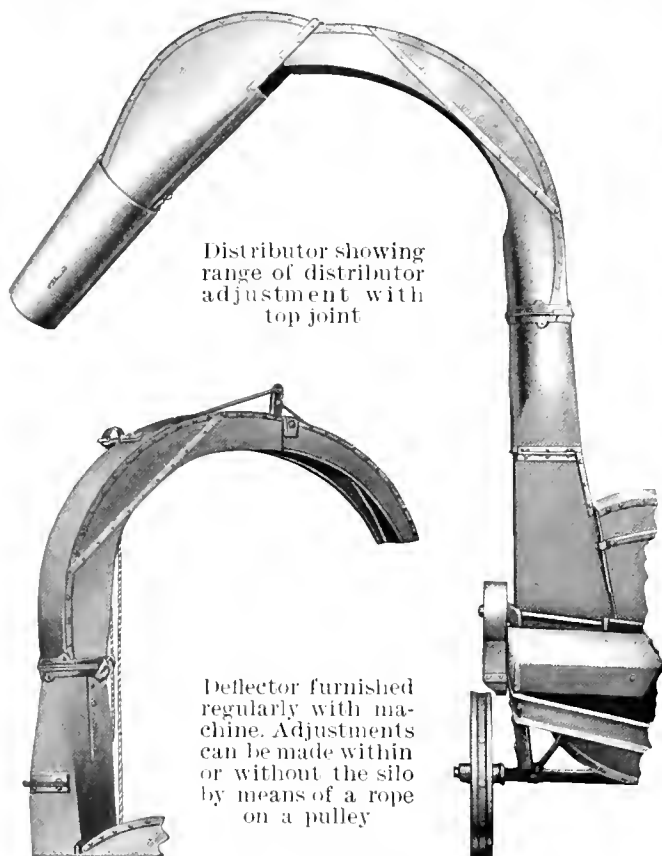
Type of flywheel used on all International Ensilage Cutters. Note heavy driving pinion, covered pulley, secure fan-blade fastenings, and substantial way in which knives are held in place



Side view looking between flywheel and feed-roll casting. Note sloping edge of casting and projection covering point of knife on flywheel



INTERNATIONAL ENSILAGE CUTTERS



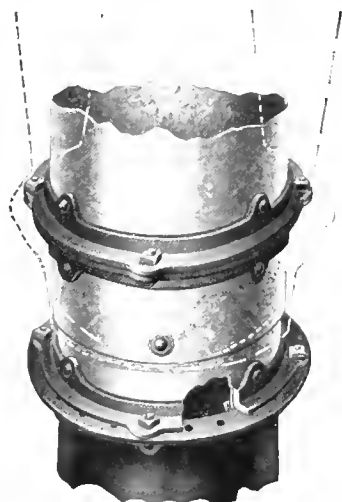
Distributor showing range of distributor adjustment with top joint

Deflector furnished regularly with machine. Adjustments can be made within or without the silo by means of a rope on a pulley



Distributor with pipe thrown to one side, showing the great range of distribution possible

Blower Pipe: Those who have had trouble with an inferior blower pipe can readily understand what an important part it plays when it comes to filling a silo. A pipe which bends or breaks causes no end of trouble, and poor connections, as a rule, either result in clogging or a loss of elevating power.



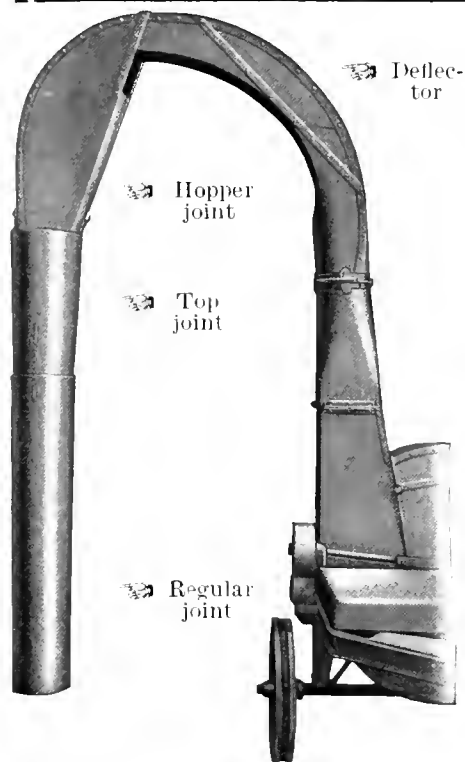
Flexible joint on Type E cutter

Of Right Size to Carry Ensilage Properly: The pipe must also be of just the right diameter to give the best results. If it is too large in diameter for the power exerted by the blower, the ensilage will not be elevated to any great height. If it is too small for the amount of ensilage cut, it will become clogged.

How Pipe is Made: The blower pipe of the International ensilage cutter is made of heavy galvanized sheet steel. Each section is fitted with two malleable iron rings. One ring is riveted to the lower end of the pipe and the edge of the sheet steel is bent over, fitting around the ring and making a tight, smooth finish. The other ring is riveted to the pipe, leaving three-quarters of an inch projecting beyond it.



INTERNATIONAL ENSILAGE CUTTERS



Deflector

Hopper joint

Top joint

Regular joint

Deflector with hopper joint, top joint, and regular joint make the distributor



Pipe connection on all sizes



Pipe and fanhouse connection on all sizes

This projection is crimped inward and fits into the lower end of the next pipe section, giving practically a telescoping effect. The top ring of the lower section and the bottom ring of the upper section are held tightly together by four bolts on the A and B, and three on the E. This form of construction gives a connection which is tight, and at the same time is perfectly smooth on the inside.

Deflector: The deflector regularly furnished with International ensilage cutters does not have the distributor attachment. It has an up-and-down adjustment so that ensilage can be thrown from one side of the silo to the other, but not in a complete circle as with the distributor.

A Distributor an Advantage: The advantage of using a distributor is apparent to anyone who has ever had the experience of working on the inside of a silo. Ordinarily, the heavier-cut fodder falls in one place and the lighter portions in another. With the distributor the silo is solidly and evenly filled, with less help and greater convenience.

The distributor and distributing pipe are furnished only on special order. Blower pipe is not priced with the machine. Length of pipe must be specified with order. For description of different sizes and lengths of pipe, see page 22.



Filling the silo



INTERNATIONAL ENSILAGE CUTTERS



Corn Chute a Big Advantage in Feeding: International ensilage cutters are convenient to feed, due to the corn chute which is set up at an angle at the end of the feed table. It is very easy to unload onto this



Observe that the feeder is at the end of the chute, free from danger of coming in contact with the mechanism

chute because the operator drives up to the end of it and drops his bundles on the incline, from which they slide down onto the feed apron. The driver throws the bundles into this chute in such a way that when they get onto the feed apron they are forced into the machine by the paddle roll, without needing an extra man at the feed opening to give them direction. This means a big saving in both labor and money. The corn chute and paddle-roll combination practically takes

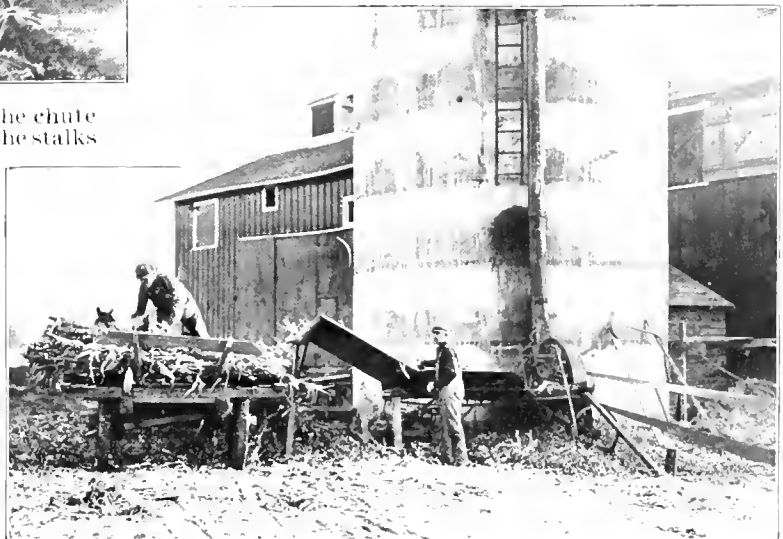


The size and shape of the end of the chute makes it an easy matter to feed in the stalks

the place and does the work of one man.

Easy to Set: When setting the machine, it is only necessary to drive up to the silo in the position desired, lower the leg at the outer corner of the conveyor, put on the chute, and brace the machine against the power.

The cuts show different positions in which the machine can be set to the silo.



The driver can drive his wagon so that he does not have to walk along the rack to feed the machine



INTERNATIONAL ENSILAGE CUTTERS



Corn fodder in the winter Note the snow

The center illustration on this page shows the method pursued by one farmer in taking care of the cut fodder.

As fast as the fodder was made, he made a housing for it out of the uncut fodder. This work was done in the winter when there was snow on the ground. The fact that the machine successfully cut this fodder is the best evidence in the world of its efficiency for all cornstalk cutting purposes.



International Ensilage Cutter cutting cornstalks, and blowing the ensilage onto a stack



Corn fodder after going through the Ensilage Cutter

Cutting Corn Fodder: A great many people who do not have silos would like to cut up their corn fodder for feed in winter. A particular advantage of this is that the fodder is put in much more edible condition for the stock than when fed direct from the field. It can also be handled much easier than when there are cornstalks in the feed. There is also less waste, as every part of the stalk is utilized.

The illustration at the bottom of the page was taken to show the great contrast between the cut fodder and the uncut. Even the fineness of the shredded stover is shown very clearly. The farmer is fast beginning to realize the advantages of dry cut fodder as a feed, over the uncut.



INTERNATIONAL ENSILAGE CUTTERS



Specifications International Ensilage Cutters

	PULLEYS (All Covered)			SPEED Rev. per Minute	Power Gasoline or Oil	Capacity Per Hour	Approx. Weight	Trucks
	Cat. No.	Frame Diameter	Frame Bore					
Type A 48" 21"	231L 14" 9"	21"	21"	500-700	20-25 H.P.	16-25 Tons	2,200 lbs.	3" Tire Rear Wheel 26" Front Wheel
	232L 13" 9"	21"	21"	Special				
	233L 12" 9"	21"	21"	Special				
	234L 11" 9"	21"	21"	Special				
	235L 10" 9"	21"	21"	Special				
	236L 9" 9"	21"	21"	Special				
Type B 42" 21"	237L 13" 9"	21"	21"	500-700	15-20 H.P.	12-16 Tons	1,950 lbs.	3" Tire Rear Wheel 22" Front Wheel
	238L 12" 9"	21"	21"	Special				
	239L 11" 9"	21"	21"	Special				
	240L 10" 9"	21"	21"	Special				
	241L 9" 9"	21"	21"	Special				
	242L 8" 9"	21"	21"	Special				
Type C 36" 13"	392L 10" 8"	13"	13"	800-900	10-15 H.P.	10-12 Tons	1,500 lbs.	3" Tire Wheels Front and Rear
	393L 9" 8"	13"	13"	Special				
	394L 8" 8"	13"	13"	Special				
	395L 7" 8"	13"	13"	Special				
	396L 6" 8"	13"	13"	Special				
	397L 5" 8"	13"	13"	Special				

BLOWER PIPE

Distributors on all machines are furnished on order, as follows:

Hopper Joint - 3' long, numbered 290-LA - one used
Top Joint - 2' long (11" Diam. one end, 9" Diam. other), numbered 295-LA - one end
Regular Joint - 1' long (10" Diam. one end, 9" Diam. other), numbered 295-LA - used as required*

Type	Diameter	Lengths
Type A	9"	1' 4' 6' 8' 10'
Type B	9"	1' 4' 6' 8' 10'
Type C	7"	1' 4' 6' 8' 10'

*The adjustable extension is removed from the regular deflector when the distributor is used. For this reason it is only necessary to order the hopper joint, top joint, and as many regular joints as necessary to reach the bottom of the silo.

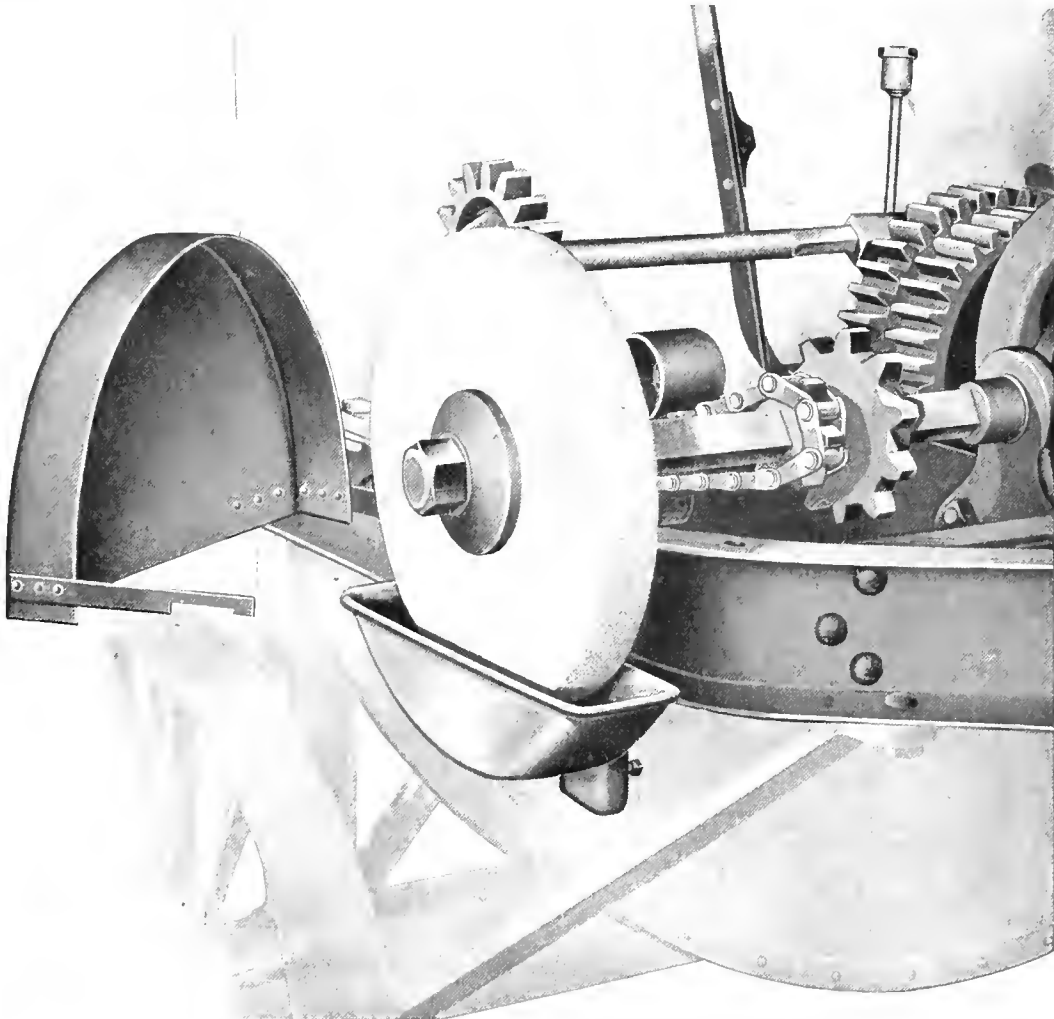


INTERNATIONAL ENSILAGE CUTTERS



Knife-Grinding Attachment for International Ensilage Cutters: The local facilities on some farms do not provide adequate means for the proper grinding of ensilage cutter knives, and poor work and an increase in the amount of power required to give the best results is always the outcome of trying to do the work with knives which are not in the best condition. For this reason a knife-grinding attachment is regularly furnished for all sizes of International ensilage cutters.

The stone is a water stone, the same as is used in the shops, and will not draw the temper from the knives. The outfit is self-contained, is shielded, and the stone is narrow enough to do good work on the curved part of the knives. As two sets of knives are furnished with each machine, one set can be sharpened while the other set is working. In this way the machine can be kept in good working condition without the delay of taking the knives to town to be sharpened. A great deal of expense and annoyance can be saved in this way.






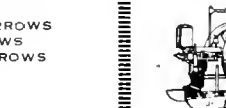










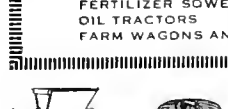
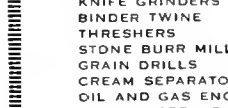
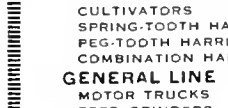










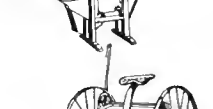












Knife-grinding attachment regularly furnished with all sizes



INTERNATIONAL ENSILAGE CUTTERS







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BINDERS
HEADERS
REAPERS
HEADER-BINDERS

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MOWERS
RAKES
HAY PRESSES
SWEEP RAKES
HAY LOADERS
STACKERS
TEDDERS
SIDE DELIVERY RAKES
COMBINED SWEEP RAKES
AND STACKERS

CORN MACHINES
PLANTERS
PICKERS
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STALK CUTTERS
SHELLERS
CULTIVATORS
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TILLAGE
DISK HARROWS
CULTIVATORS
SPRING-TOOTH HARROWS
PEG-TOOTH HARROWS
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